

PCT WO 99/20674

AN 1999:286018 CAPLUS
 DN 130:325795
 TI Energy radiation curing process for resins containing radiation shielding
 IN Hayashi, Noriya; Hayashi, Shunichi
 PA Mitsubishi Heavy Industries, Ltd., Japan
 SO PCT Int. Appl., 71 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 IC ICM C08G059-40
 ICS C09D163-00; C09D004-00; C08J005-24
 CC 37-6 (Plastics Manufacture and Processing)
 FAN.CNT 1

4/29/99
 Application EFD 9/24/99
 = EP 945,475
 9/29/99

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9920674	A1	19990429	WO 1998-JP4660	19981015
	W: CA, CN, KR, RU, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 11193322	A2	19990721	JP 1998-283867	19981006
	EP 945475	A1	19990929	EP 1998-947885	19981015
	R: BE, DE, FR, GB, IT, NL				
PRAI	JP 1997-285295		19971017		
	JP 1998-283867		19981006		
	WO 1998-JP4660		19981015		
OS	MARPAT 130:325795				
AB	Title process, esp. for carbon fiber-reinforced plastics, uses .gtoreq.2 photoinitiators, wherein the irradsn. source generates a first energy of different kind, which cures the resin or generate a second energy to cure the resin. Thus, 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate (ERL 4221) 100, a photo-thermal initiator SL 80L 1.75, a cationic photopolymn. catalyst Daicat 11 0.75 parts was mixed in a glass container covered with black paper and irradiated with UV light, and the resin was cured after a few minutes.				
ST	energy radiation resin curing shielding presence				
IT	Carbon fibers, uses				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(-reinforced composite; energy radiation curing process for resins contg. radiation shielding)				
IT	Diazonium compounds				
	Phosphonium compounds				
	Pyridinium compounds				
	Sulfonium compounds				
	RL: CAT (Catalyst use); USES (Uses)				
	(catalyst; energy radiation curing process for resins contg. radiation shielding)				
IT	Crosslinking				
	Photopolymerization catalysts				
	(cationic; energy radiation curing process for resins contg. radiation shielding)				
IT	Adhesives				
	Coatings				
	Crosslinking				
	Crosslinking catalysts				
	Fiber-reinforced composites				
	Inks				
	Light-sensitive materials				
	Photochemical crosslinking				

Photochemical crosslinking catalysts
 Radical crosslinking
 Radiochemical crosslinking
 Sealing compositions
 Varnishes
 (energy radiation curing process for resins contg. radiation shielding)
 IT Epoxy resins, processes
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (energy radiation curing process for resins contg. radiation shielding)
 IT Butadiene rubber, processes
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (epoxidized, PB 3600; energy radiation curing process for resins contg. radiation shielding)
 IT Onium compounds
 RL: CAT (Catalyst use); USES (Uses)
 (iodonium, catalyst; energy radiation curing process for resins contg. radiation shielding)
 IT Cationic polymerization catalysts
 (photochem.; energy radiation curing process for resins contg. radiation shielding)
 IT 9003-17-2
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (butadiene rubber, epoxidized, PB 3600; energy radiation curing process for resins contg. radiation shielding)
 IT 32760-80-8, Irgacure 261 87301-55-1, Sanaid SI 100 106587-18-2, Dimethyl-4-thiophenoxyphenylsulfonium hexafluoroantimonate 125054-47-9 134508-06-8, Dibenzyl-4-hydroxyphenylsulfonium hexafluoroantimonate 135691-31-5, 4-Acetoxyphenyldimethylsulfonium hexafluoroantimonate 200075-02-1, CI 2855 223560-77-8 223714-52-1, CI 2734 223714-53-2, Daicat 11
 RL: CAT (Catalyst use); USES (Uses)
 (catalyst; energy radiation curing process for resins contg. radiation shielding)
 IT 106611-10-3, Bis[4-(dimethylsulfonio)phenyl] sulfide bis(hexafluorophosphate) 219134-67-5, SI 80L
 RL: CAT (Catalyst use); USES (Uses)
 (energy radiation curing process for resins contg. radiation shielding)
 IT 2386-87-ODP, polymers with vinyl-contg. cycloaliph. epoxides 53895-44-6P
 77272-87-8P 143685-65-8P 175648-62-1P 191035-71-9P 223560-82-5P 223560-84-7P 223560-86-9P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (energy radiation curing process for resins contg. radiation shielding)
 IT 25068-38-6, Epikote 828 25085-98-7, ERL 4221 29407-84-9, Epikote 815 29797-71-5, ERL 4299 61090-00-4, Epiclon N 740 63939-13-9, Epikote 154 65581-98-8, Epiclon 830 80111-79-1, EOCN 102S 81775-74-8, EPPN 201 84778-06-3, Epikote 152 96957-48-1, Epiclon N 665
 104841-49-8, EOCN 1020 106387-90-0, Epikote YX 310 117681-05-7, Epikote 1001B80 122157-50-0, Epikote 5046B80 135151-14-3, Araldite CY 177 151465-23-5, Celloxide 2081 159777-68-1, Epikote 806
 RL: PEP (Physical, engineering or chemical process); PROC (Process)

RN 219134-67-5 REGISTRY
CN Sanaid SI 80L (9CI) (CA INDEX NAME)
OTHER NAMES:
CN SI 80L
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

21 REFERENCES IN FILE CA (1967 TO DATE)

21 REFERENCES IN FILE CAPLUS (1967 TO DATE)

RN 25085-98-7 REGISTRY
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymers (8CI)

OTHER NAMES:

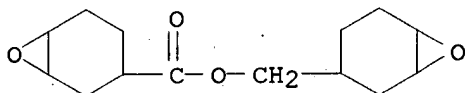
CN (3,4-Epoxy cyclohexyl)methyl 3,4-epoxycyclohexylcarboxylate polymer
CN 3,4-Epoxy cyclohexylmethyl 3',4'-epoxycyclohexanecarboxylate polymer
CN 3,4-Epoxy cyclohexylmethyl 3,4-epoxycyclohexanecarboxylate polymer
CN 3,4-Epoxy cyclohexylmethyl 3,4-epoxycyclohexanecarboxylate resin
CN 3,4-Epoxy cyclohexylmethyl 3,4-epoxycyclohexanecarboxylate homopolymer
CN 3,4-Epoxy cyclohexylmethyl-3',4'-epoxycyclohexanecarboxylate homopolymer
CN Adeka Optomer ERL 4221
CN Adeka Optomer KRM 2110
CN Araldite CY 179
CN Bakelite ERL 4221
CN Bakelite ERL 4221G
CN Bakelite ERL 4421
CN CEL 2021P
CN Celloxide 2021
CN Celloxide 2021A
CN Celloxide 2021P
CN Celloxide 2201
CN CH 221
CN Chissonox 221
CN Chissonox CX 221
CN CP 1608
CN CX 221
CN CY 179
CN Cyclomer 2021P
CN Cyracure 6110
CN Cyracure UVI 6110
CN Cyracure UVR 6100
CN Cyracure UVR 6105
CN Cyracure UVR 6110
CN Degacure K 126
CN Degussa 126
CN Diepoxid 126
CN Epikote 171
CN ER 4221
CN ERL 4211
CN ERL 4221
CN ERL 4221D
CN ERL 4221E
CN ERL 4421
CN ERLA 4221
CN K 126
CN KRM 2110
CN Poly[(3,4-epoxycyclohexyl)methyl 3,4-epoxycyclohexanecarboxylate]
CN SarCat K 126
CN Ucar 4221
CN Unox 221
CN Unox 4221
CN UP 632
CN Uvacure 1500

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 9083-95-8, 11120-79-9, 125053-37-4, 121396-47-2, 129773-39-3, 95078-13-0,
95078-14-1, 50809-37-5, 50861-60-4, 61489-54-1, 65430-69-5, 111483-58-0,
137607-28-4, 146123-76-4, 30350-17-5, 39354-66-0, 52725-58-3,
189201-55-6,
216496-08-1, 251369-29-6, 299423-35-1
MF (C14 H20 O4)x
CI PMS, COM
PCT Epoxy resin, Polyester
LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, CHEMLIST, CIN, IFICDB, IFIPAT,
IFIUDB, PROMT, TOXCENTER, USPATFULL
Other Sources: NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 2386-87-0
CMF C14 H20 O4



1752 REFERENCES IN FILE CA (1967 TO DATE)
132 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1758 REFERENCES IN FILE CAPLUS (1967 TO DATE)